Acquisition Reform Panel

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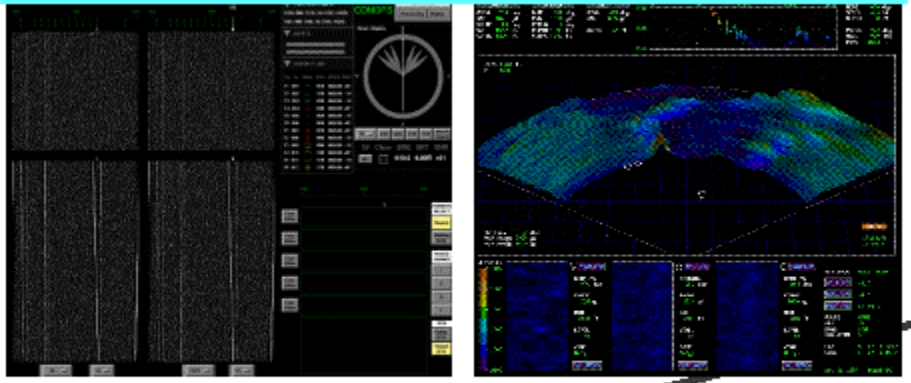
Acoustics - Rapid COTS Insertion AN/BQQ-10 An Acquisition Reform Success

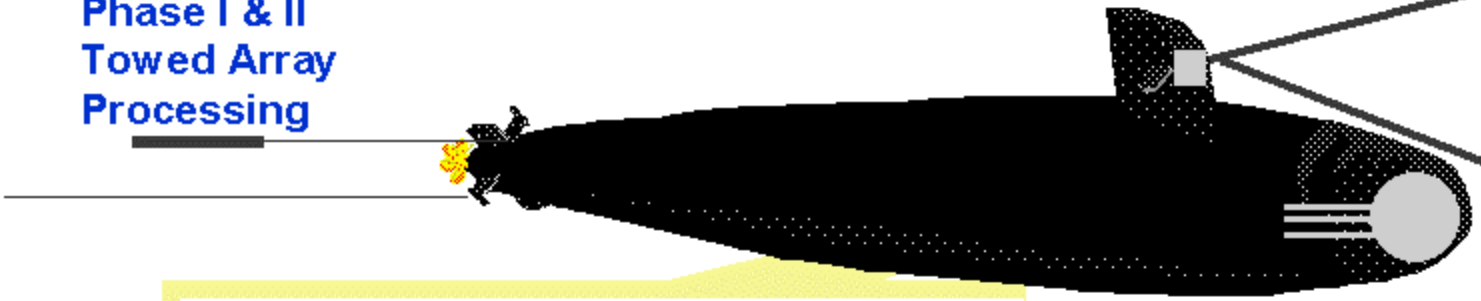
A-RCI THE U. S. NAVY SOLUTION FOR ACOUSTIC SUPERIORITY

- Two separate ACAT III Programs
- COTS, Open Systems processing replacement for legacy processing
- Build-test-build linked closely with Advanced Development
- First two systems fielded in 18 months
- Baseline for Virginia Class and Common Acoustic Processor

Advanced OM Concepts

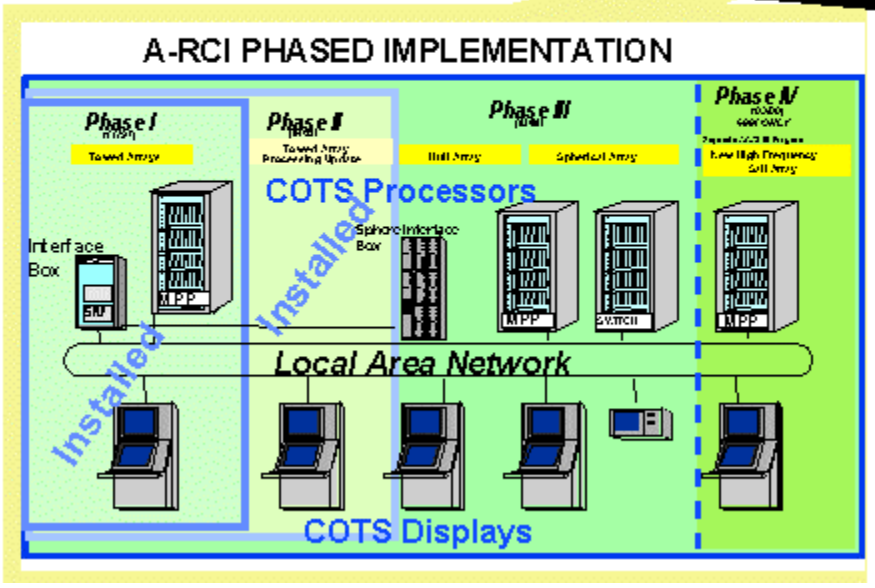


Phase I & II
Towed Array
Processing



Phase IV
High
Frequency
Upgrade

Phase III
Hull/Sphere
Array
Processing

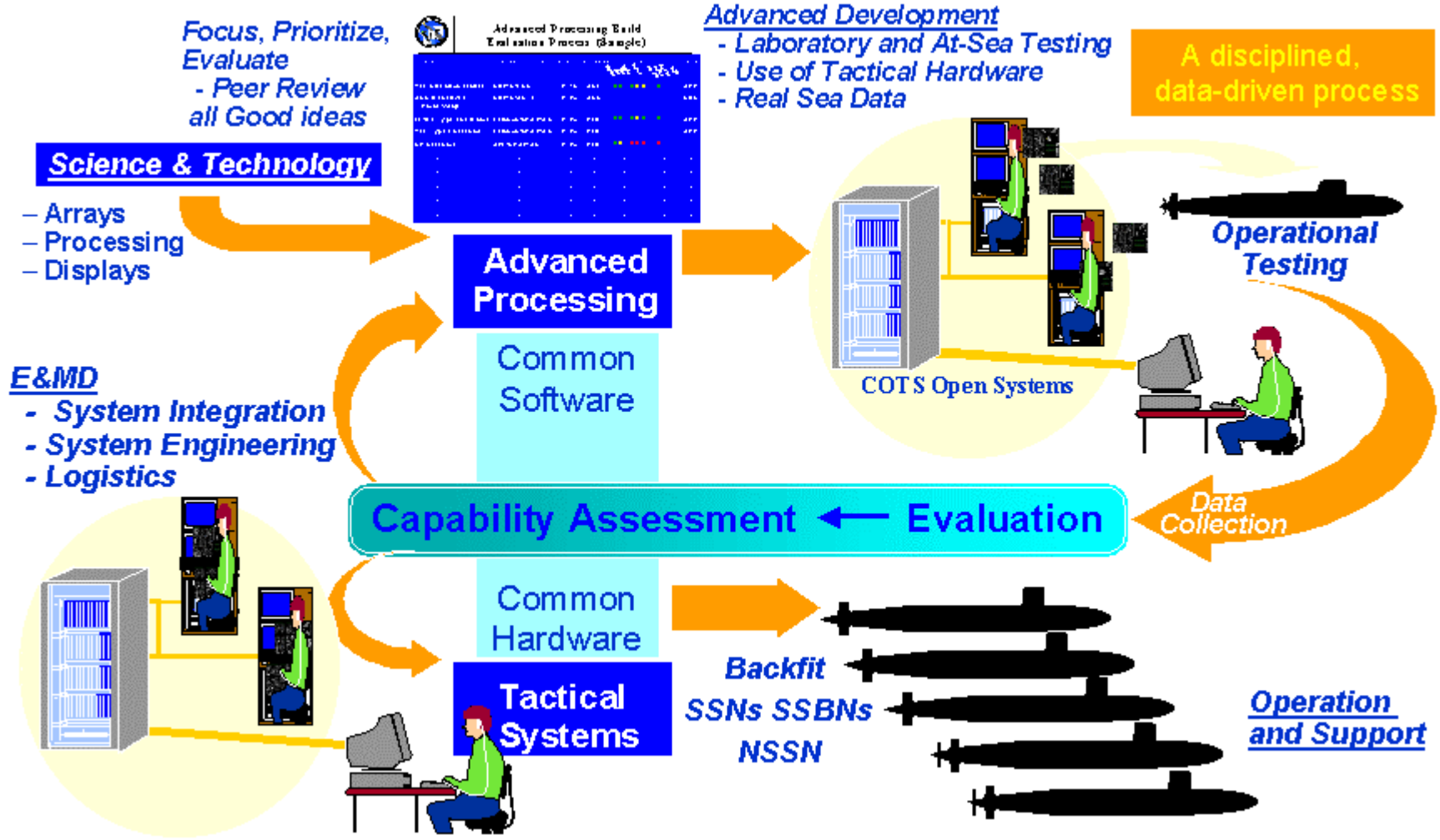


Hardware Features

- MultiPurpose Processor
- AN/UYQ-70 Display

Building on Momentum!
Change Through Ex-Change
1999
Focusing on Results!

The APB Genius



Hurdles & Metrics

- **Hurdles:**
  - **Creating a Open Systems/Business model**
    - **Time from Advanced Development to Fleet Introduction took too long**
    - **Capability needed now**
    - **Acceptance of innovations from many sources**
- **Metrics:**
  - **Quantifiable performance characteristics tested with real sea data against actual targets of interest**
  - **Peer reviews allowing consensus among scientific community, eliminate one winner takes all syndrome**
  - **Time to delivery**

Lessons Learned

- Change is hard work
  - Diligence and risk taking pays off
- Significantly reduced time interval between system changes
  - Impacts operator proficiency/training
  - Impacts supportability
  - Process re-engineering necessary to keep pace with technology
- Fleet user involvement in development process is major factor for success

Results:

- A-RCI installed 18 months after program inception, 12 installs this year with first APB integrated
- Process is repeatable and sustainable, model for others to follow
- MOUs in place with SPAWAR (IUSS) and PMS411 (SQQ-89) for Common Acoustic Processor